SIEMENS

Siemens Remote Services

Hardware Installation Guide

RDIAG Router 805 Analog
Partnumber 73 82 844

English
Doc. Gen. Date: 01-02
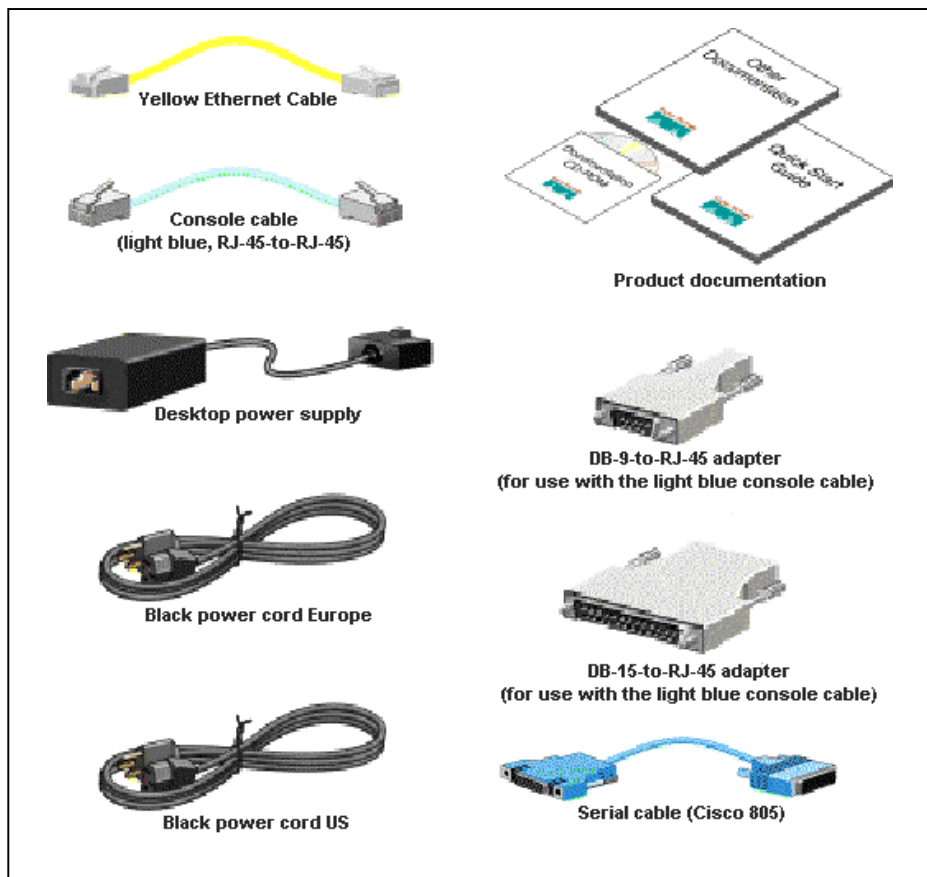
Revisionhistory

Chapter	Pages	Revision
all	all	01
all	all	02

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Installation instruction

1. Unpack the Box

2. Before Installation

Cisco 800 series routers are shipped to you ready for desktop mounting. Before connecting the router to the network and power supply, simply set the router on a desktop, shelf, or other flat surface. The router you got is preconfigured by SIEMENS Medical Solutions. The router package includes power cords for the US and Europe. You need to provide a power cord for other countries. You need to provide a modem as specified in Appendix B. Pay attention to the Maximum Cable Distances (see Appendix A).

The following figure shows the router ports. These ports and the cables are color-coded to help you connect the cables correctly. The figures in the following chapter may differ in some details from your router.
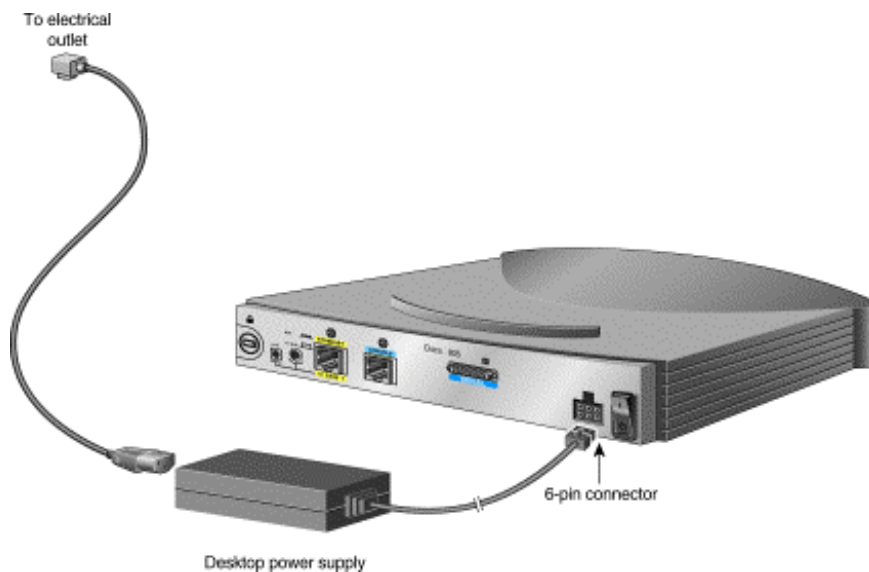
3. Connecting Power and Turning the Router On

You can verify your installation by checking the appropriate LEDs during the installation process if you switch the router on before making any network connections.

Follow these steps to connect the router to power and turn it on:

Step 1 Make sure the router power is off.
Step 2 Connect the power supply cable to the 6-pin connector on the rear panel of the router
Step 3 Connect the female end of the power cable to the desktop power supply
Step 4 Connect the male end of the power cable to an electrical outlet
Step 5 In order to switch the router on, set the power switch (I/0) to I.
Step 6 Check the following LEDs:
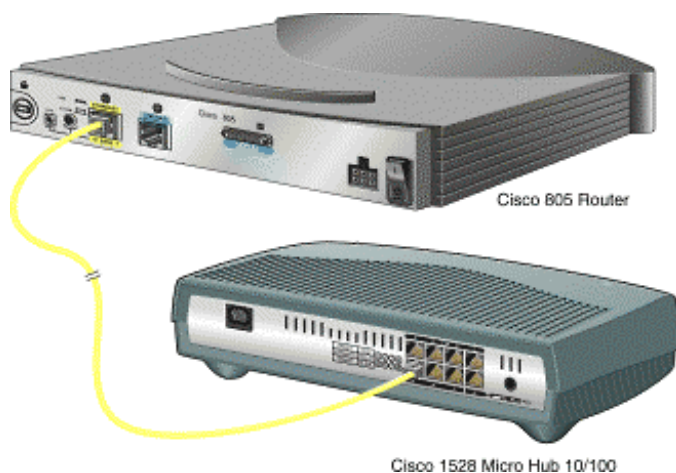 * The OK LED (front panel)---On if power is being supplied to router.

Figure 1

4. Connecting the Router to the LAN

The yellow straight-through RJ-45-to-RJ-45 cable (contained in the package) is necessary for this connection. Follow these steps to connect the router to a 10BaseT Ethernet LAN (Figure 2):

Step 1 Connect one end of the yellow cable to the yellow Ethernet port (10BASE T) on your Cisco 805.

Step 2 Connect the other end of the cable to one of the ports on the 10BaseT hub, switch or network walljack. If you want to connect the router directly to a PC, Server or Workstation you will need to set the router HUB/NO HUB Button to OUT (the default setting is IN).

Step 3 Check the following LEDs:
- The LINK LED (rear panel, next to 10BaseT port) --- On, if the connection is working properly
- If the LINK LED is not on, press the HUB/NO HUB button

Figure 2

5. Connecting the Cisco 805 to the WAN

Depending on where the Cisco 805 is used, the serial connection may be different. Follow these steps to connect the Cisco 805 to the WAN:

Step 1 Use the blue serial cable and connect one end of the cable to the serial port of the router.
Step 2 Connect the other end of the cable to the asynchronous modem that you provide
Step 3 Connect the modem to the telephone line

In case the modem you want to use was formerly connected directly to a system/modality, the modem needs to be reset to factory defaults before it can be used. For Multitech modems, this procedure is described in *Appenix F*, for other modems, refer to their instruction guide.
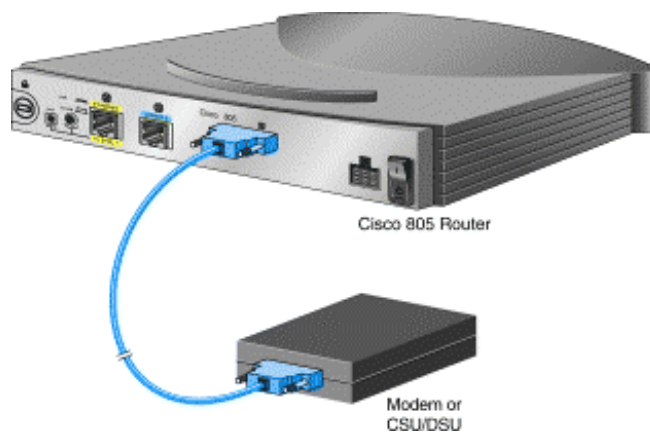

Cisco 805 Router

Modem or CSU/DSU

Figure 3

6. Final Configuration – performed by SIEMENS Remote Services

The router hardware configuration is finished. The final configuration will be carried out by SIEMENS Remote Service. This service is free-of-charge. **DO NOT** start to configure the router by yourself!
In order to use the central service of remote final configuration, fill out the checklist which can be found either in the router box or in the internet at the following address:
`http://www-td.med.siemens.de/router/checklist.doc`

It is important that you do not undertake any additional configurations on your own since the configuration needs to comply with certain standards in order for the router to function properly.

The final configuration includes registering the medical systems by the remote diagnostic server at SIEMENS Remote Services.

7. Appendix

Appendix A) Maximum Cable Lengths

Cable	Maximum Length
Ethernet	100 metres
ISDN S/T	10 metres
Telephone cable	152 metres

Appendix B) Recommended Modems

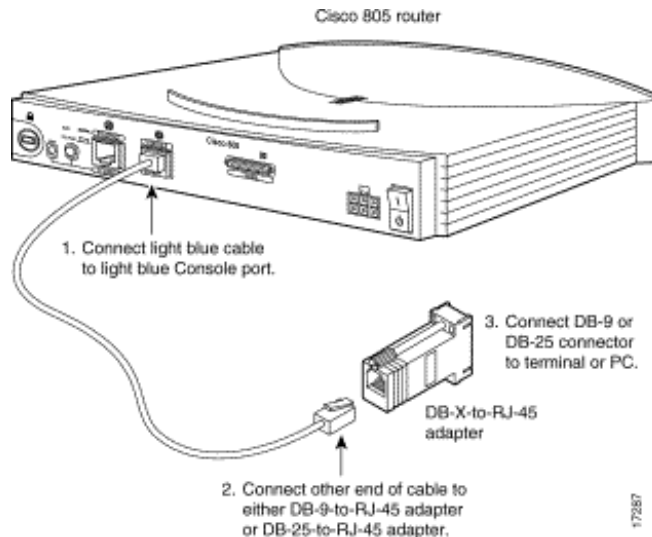| Country	Modem Typ	SIEMENS Part#
Germany	Multitech MT2834ZDXIe-33-DE	5533356
Japan	Multitech MT 2834 ZDXI-33-JP	5533364
Switzerland	Multitech MT2834ZDXIe-33-CH	5533372
Sweden	Multitech MT2834ZDXIe-33-SE	5533380
Norway	Multitech MT2834ZDXIe-33-NO	5533398
Netherlands	Multitech MT2834ZDXIe-33-NL	5533406
Italy	Multitech MT2834ZDXIe-33-IT	5533414
Belgium	Multitech MT2834ZDXIe-33-BE	5533422
United Kingdom	Multitech MT2834ZDXIe-33-GB	5533430
USA/Canada	Multitech MT2834ZDXB-SC	5533463
France	Multitech MT2834ZDXIe-33-FR	5533448
Austria	Multitech MT2834ZDXIe-33-AT	5533455
Other	Multitech MT2834ZDX+ country specific adapter	obtain modem locally

Appendix C) Connecting the Console Port

The cable and adapters required for this connection are included with the router. Follow these steps to connect the router to a terminal or PC:

Step 1 Connect one end of the light-blue console cable to the light-blue CONSOLE port on the router (Figure 4).

Step 2 Use the correct adapter to connect the other end of the cable to your terminal or PC (serial interface).

Note If your terminal or PC has a console port that does not match any of the adapters, you must provide the correct adapter for that port.

Figure 4

Appendix D) Passwords

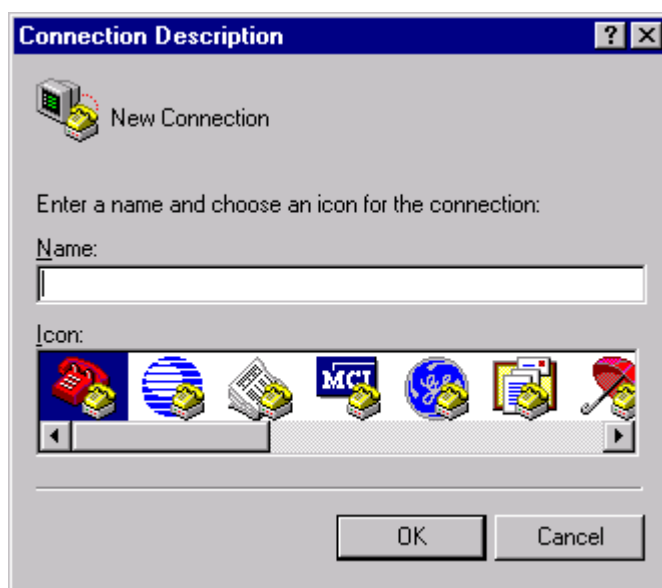The enable password – used to get into the enable modus of the router – is **presec**.

Appendix E) Configure PC (e.g. Hyperterminal) for communication

Once your router is correctly connected to your PC, you can start building your configuration. The Windows Hyperterminal emulation is the interface to your Cisco 805 router.

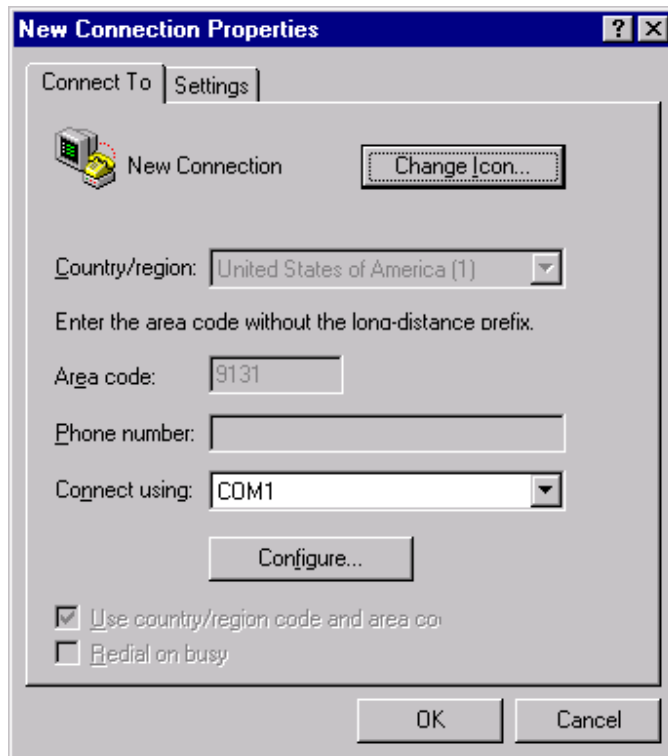**Step 1** Start Hyperterminal from the „Programs – Accessories – Hyperterminal" menu in the start panel. If you do not find the program there or anywhere else on your computer, you will have to install it first.

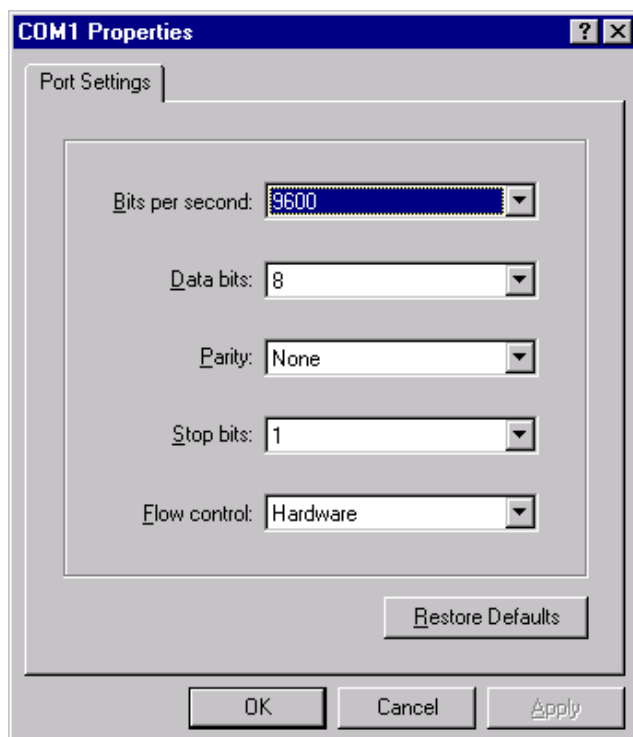**Step 2** In the „Connection Description" dialogue box
- enter a name for the connection and choose an icon. If you want to save the connection settings, click „OK"
- *or* click „Cancel"

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Installation instruction

Step 3 Choose „Properties" from the „File" menu. On the „Connect to" tab, check, if the port (e. g. COM1) to which your router is connected is selected.

Step 4 Click „Configure" and make sure that the settings have the following values: Bits per second: 9600, Data bits: 8, Stop bits: 1, Flow control: Hardware. Click „OK" twice to leave configuration mode.

Step 5 Choose „Connect" from the „Call" menu to establish a connection to the router.

Appenix F) Concerning modems formerly directly connected to systems

In case you ordered a new analog SRS router (Cisco 805 or Cisco 1603 Analog), and the router is supposed to be connected to a modem which was formerly connected directly to a system/modality, it is absolutely necessary to reset the modem to factory defaults. Otherwise the modem cannot be used along with a SRS router.

The procedure to configure the modem via the router is called ‚reverse telnet'. In order to carry out this procedure, please follow the steps below. This is **only** the procedure for **Multitech** Modems. If you have a different type of modem, you will have to consult the instruction manual in order to reset the modem to factory defaults.

Step 1 Connect the light blue console cable to the router and to the 9 pin serial connector on the PC.
         [Refer to *Appendix* in the HW installation guide.]
Step 2 Ensure that the router is connected to Ethernet.
Step 3 Start Hyperterminal (click Start – Programs – Accessories – Hyperterminal – Hyperterminal).
         [Refer to *Appendix E* in the HW installation guide.]
Step 4 Enter a name for this connection and click „OK".
Step 5 In the drop-down-box choose the COM port the console cable is connected to.
Step 6 In the properties dialogue box click „OK".
Step 7 Hit ‚Enter' until you see the router prompt, e. g. `jac0356323qc828>`

You have now established a connection to the router and will enter the following commands on the router itself:

		description	Router prompt	command
Step 8		Enter into the enable modus of the router	`jac0356323qc828>`	**enable**
Step 9		Enter the password to get into the enable modus (this entry is not visible)	`password:`	**presec**
Step 10		Enter into the configuration modus of the router	`jac0356323qc828#`	**configure terminal**
		The following output will appear	`Enter configuration commands, one per line. End with CNTL/Z.`	
Step 11		set the ip for modem1	`jac0356323qc828(config)#`	**ip host modem1 2001 10.6.254.2**
Step 12		Enter ctrl-z	`jac0356323qc828(config)#`	**^z**
		The following output will appear	`3d22h: %SYS-5-CONFIG_I: Configured from console by console`	
Step 13		log onto the modem	`jac0356323qc828#`	**modem1**
		The following output will appear	`Trying modem1 (10.6.254.2, 2001)... Open` `User Access Verification`	
Step 14		Enter the username	`username`	**prerdiag**
Step 15		Enter the password (not visible)	`password`	**preset**
		The following output will appear	`Password OK`	
Step 16		Echo on		**ate1**
		The following output will appear	`OK`	
Step 17		Reset to factory settings. **Note**: 0 is „zero"		**at&f&w0**
		The following output will appear	`OK`	
Step 18		Press ctrl-shift-6		**^[shift] 6**
Step 19				**x**
Step 20		Disconnect from the modem	`jac0356323qc828#`	**disconnect**
Step 21		Confirm that the connection to modem1 shall be closed	`Closing connection to modem1 [confirm]`	**<cr>**
Step 22				**exit**

Now your modem and your router are ready to be remotely configured by SIEMENS Remote Services.

Appendix G) ISDN use of the analog router

Note: Should it become necessary to switch from the analog connection to an ISDN connection, the configuration can be done via the analog interface of the router.